...connecting to the aftermarket

ABMIPOD010
iPod Interface for BMW

Installation Guide/ User Manual

Copyrights and Trademarks

iPod is a trademark of Apple,Inc

All rights reserved.

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Icon legends

Turn jog dial

Turn jog dial repeatedly

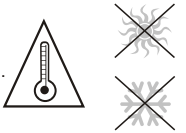
Press button

Press button repeatedly

scroll

Warning and safety!

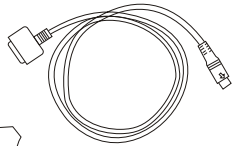
Please read these instructions carefully before proceeding. Failure to follow instructions may result in improper operation or injury.

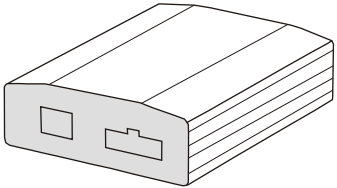


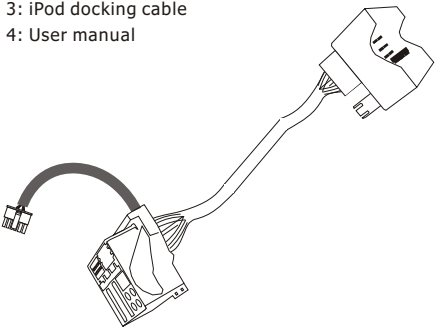
-Do not open,disassemble or alter the interface in anyway.
-Do not insert anything into the casing.
-Do not cut or try to alter cables in any way and always use the correct connections.
-Only operate unit when stationary or ask passengers to operate it for you.
-Do not allow the Apple iPod to distract you from driving.
-Exercise good judgement and keep your eyes on the road at all times.
-Do not expose unit to extreme temperatures,humidity or shock.
-Keep the unit and iPod away from fluids.
-Keep away from children!-Interface components may contain small parts,can be broken or disassembled and components may become loose from vibration and heat.Small components and packaging materials may be a chocking hazard when handled by children.

Integration Kit contents

1: Vehicle specific interface unit
2: Vehicle specific Harness
3: iPod docking cable
4: User manual







BMW Specific
Harness 40pin cable

Supported ipod models and firmware version requirements

FW:3.1.1

ipod
4th generation
20GB 40GB

FW:1.2.1

ipod
5th generation(video)
30GB 60GB 80GB

FW:1.3.1

ipod nano
1st generation
1GB 2GB 4GB

FW:1.2.1

iPod
4th generation color display
20GB 30GB 40GB 60GB

FW:1.4.1

ipod mini
4GB 6GB

FW:1.1.3

ipod nano
2nd generation(aluminum)
2GB 4GB 8GB

FW:1.0.3

ipod classic
80GB 160GB

FW:1.0.3

ipod nano
3th generation(video)
4GB 8GB

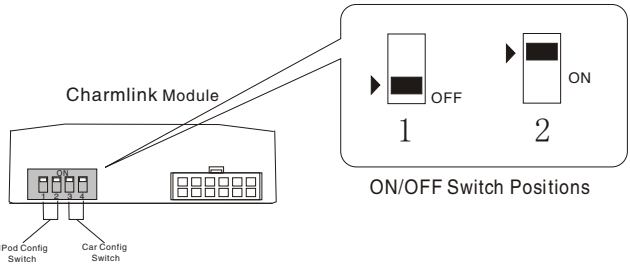
FW:3.0.0

ipod touch
8GB 16GB 32GB

For the latest fireware versions and models not listed, please contact your authorized dealer

Dip switches

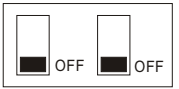
The configuration switches located on the module are used to set the operation of the interface by the installer. Incorrect dip switch settings may cause the interface not to work properly or not to operate at all. **Disconnect the vehicle harness from module and cycle ignition off for 50 seconds after changing the switches!**



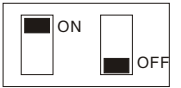
Dip switch settings

Car configuration switches			
Selected emulation			
CD changer 1		CD changer 2	
Dip switch3	Dip switch4	Dip switch3	Dip switch4
OFF	OFF	ON	OFF
Recommended for late model Business CD and Navigation Radio systems.		This setting is to be used on early model Business CD and Business Cassette head units.	

Ipod configuration switches	
Selected emulation	
Advance mode	
Dip switch3	Dip switch 4
OFF	OFF
It is best selected when text display is supported by the radio. After connecting the ipod you will see the BMW logo on the screen. After the initialization the ipod will be locked for an increased interface functionality	



Default



Default

Installation

Installation should only be performed by a qualified professional. Beware of sharp edges to avoid injury and exercise caution when removing trims as they may break. The module should be placed at an accessible location to allow AUX cable to be connected, such as in the glove box, the center consoles, under the front seat or in the trunk.

1: pull vehicle into service bay.

2: Open trunk and access trunk area.

3: Disconnect both battery terminals. These cables must be disconnected during installation to ensure proper initialization of the charmlink module when it is connected.

4: CD changer cable will be on left hand side on most model (in trunk).

Some models are different:

X3 CD Changer cable is located underneath carpeting under the center console.

Z4 CD changer interface is located between seats, underneath subwoofer.

Mini cooper/Cooper S CD Changer interface is located on right hand side of vehicle(trunk area)

If you car model don't have pre-wired CD changer cable in trunk, please use BMW Specific harness 17 pin and 40 pin cable

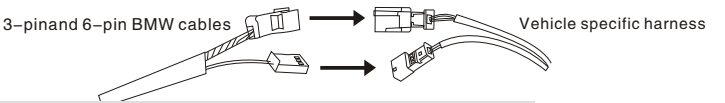
5 Remove carpet and side cover to gain access to CD Changer BUS harness. If CD Changer is present, it will need to be disconnected and/or removed.

During installation，make sure that the 3 pin connector from the vehicle does not have a brown wire in the middle. The 3 pin Connector of the phone pre-wiring is identical looking to the 3 pin connector of the CD changer pre-wiring!Do not use the 3pin connector that has a brown wire in the middle,but locate the one that has the brown wire on the side!Incorrect connection will result in permanent damage to the unit and will not be covered by warranty!

6 Locate both the 3-pin&6-pin connectors in the trunk If the CD Changer is present，disconnect the cables and set aside.If no CD Changer is present,the cables will be bundled and tucked away in the rear trunk area.

Some vehicles will have the CD Changer wiring in a protective sheath which may make it more difficult to locate.

7 Connect both 3-pin and 6-pin cables to the BMW specific harness.

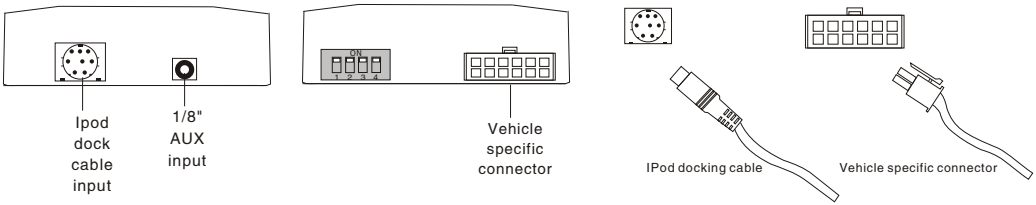


8 Fold down rear seats (if applicable)and route the 5m extension cable to the rear seat bottom cushion

9 Remove bottom seat cushion by lifting up and route wiring underneath

10 Route the remainder of the interface cable in the best possible location(e.g.under the door sill or under the drivers seat.

11 Connect the vehicle specific connector and the iPod docking cable to the module. Apply cable ties to secure the cables.



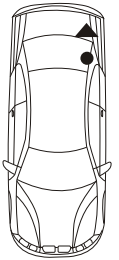
DSP integration

If your vehicle has Digital Signal Processing(DSP), the purchase of a DSP kit may be necessary.

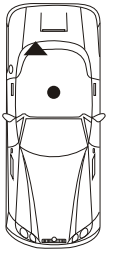
To see if your vehicle has DSP look for a bare metal coax cable and a 3-pin connector. If you don`t find a coax cable and find a 6-pin connector along with a 3-pin connector, your vehicle doesnt need this DSP kit.

Connector location

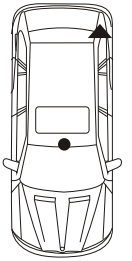
3–pin connector	●
DSP amplifier	▲



BMW 5 series and X5



BMW Z4



BMW X3

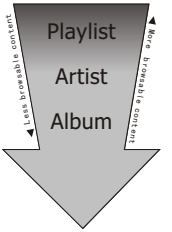
IPOD audio source

Text display setting
Make sure to select the appropriate test display setting during the initial set up of the kit.
To configure text display on BMW radios, press DISC 6 then select a Track number that corresponds to the designated display:

Track#	Text Displayed On	Application	Characters
99	No Text	All	----
01	Radio	3-Series/Z3/z4/X3/`04-K1200	12
02	Navigation	All with nav.	15
03	Cluster/OBD	5-Series/7-Series/X5 w/o nav.	20
04	MID	Alternate for 5-Series/7-Series/X5	11
05	Alternate Location	All with nav.	8
06	Alt Locat.(large font)	All with nav.	8
07	Resume Text	Use if text does not resume after phone call	----
08	Motorcycle	05+K1200	12
09	No Text	All	----

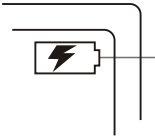
iPod hierarchy

By default，the interface creates a Playlist having a name that is the same as the name of the iPod. This Playlist is the very first on the list of Playlists shown while browsing in Playlist mode. This Playlist contains all the songs on the iPod. Once a Playlist is active an Artist may be selected within that Playlist using the Artist Mode. Albums by the selected Artist and within the selected Playlist may be selected in Album Mode. ” ALL ARTIST” and” ALL ALBUM” designate all available content in those categories.



Charging

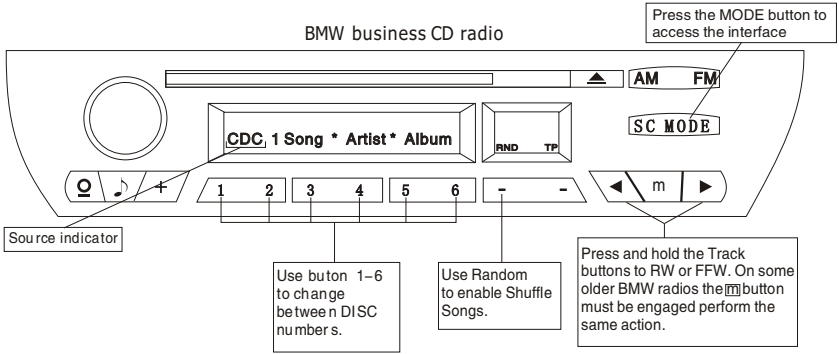
The interface automatically charges the battery of the iPod when connected and the key is in the ACC/ON position.



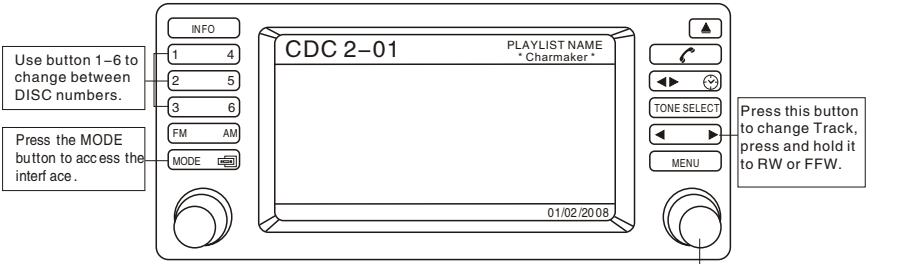
Charging icon will appear on the upper right corner of the iPod screen to indicate charging.

Operating the interface

Press the MODE button to access the interface for iPod and its features. Pressing this button repeatedly will cycle through sources present in your vehicle. When the iPod audio source is active (DISC 5, track 1), use the Track button to select next/previous Song.

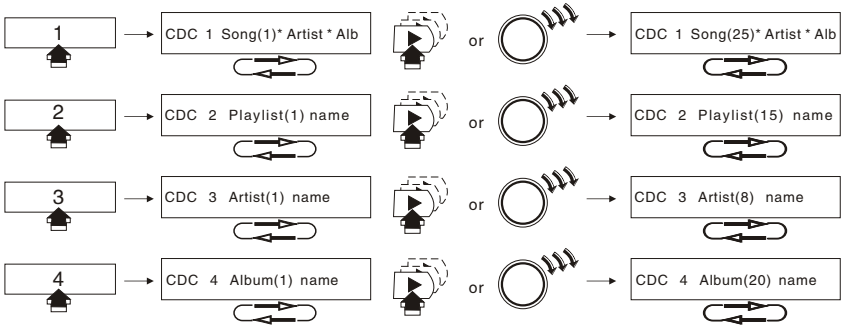


BMW radio with Navigation


Use button 1–6 to change between DISC numbers.
Press the MODE button to access the interface.
INFO
1 4
2 5
3 6
FM AM
MODE
CDC 2–01
PLAYLIST NAME
* Charmaker *
01/02/2008
TONE SELECT
MENU
Press this button to change Track, press and hold it to RW or FFW.
Turn the jog dial to change Track. Note that a 9 second timeout is engaged once any of the alternate display buttons are pressed. If exiting from anyof these sub–screens without waiting for then normal timeout, you MUST wait for 9 seconds before being able to use the jog dial again to navigate content.

browsing function

The integration kits features content browsing. After connecting the iPod, select the desired browsing mode by pressing the appropriate DISC button. Press on turn the Track button repeatedly to browse contents; 1 second after releasing the button, your selection is executed.

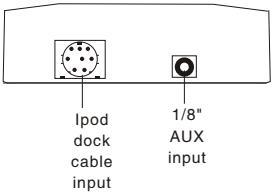


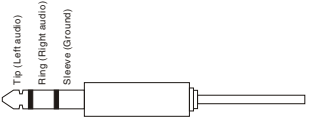
In DISC 5, you can select the audio source (ipod/AUX1), in DISC 6, you can set Text display and view firmware version information.

Auxiliary audio source

Connections

The interface is equipped with a 1/8" AUX jack connection to connect an auxiliary device，such as an MP3 player,DVD player or other audio source. To access the AUX audio source,select DISC 5 , Track 2 or Preset 5,Channel 2.





1/8"mini stereo jack, not included

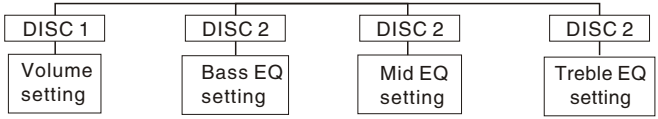
Making the adjustments

While listening to the auxiliary device，adjust the volume(gain),bass,mid and treble by turning the Tune dial or pressing the Seek button. DISC/Preset 1-4 modes select what adjustment the Tune/Seek buttons perform.

AUX audio source setting

The auxlliary input has settings for **gain,bass,mid** and **treble** in order to optimize sound.
Volume(Gain)should be adjusted if the audio level from the auxiliary device is too low or to high. If you hear distorted audio while playing the auxiliary device. You need to reduce(-)the gain. If you notice that the audio is too quiet then the gain setting should be increased(+). Default settings are"50"("68"for gain)and values may be adjusted in increments between 01-99,**Bass,Mid** and **Treble** should be adjusted to compensate for the acoustic presets of the radio.

Note: If you are using an AUX device that is using the vehicle's power source and not its own battery, you may have to use a GROUND—LOOP isolator to avoid grounding and engine noise



Troubleshooting

Problem	Solution
Cannot select CD changer source.	Check DIP switch settings (refer to p.9). With the ignition OFF disconnect vehicle harness from module for 50 seconds
Radio/NAV display only shows DISC and track number, but there is no iPod control.	Select DISC 5 and make sure itis set to Track 01.
Radio/ steering wheel controls do not operate iPod.	Reset iPod and make sure most recent iPod firmware is installde.
No text display.	Make sure DIP switch settings are corretly set for text display. Note that early model Mini Cooper vehicles do not support Text.

Troubl esho oting

Problem	Solution
No audio from iPod source.	Reset the iPod.
iPod does not charge.	Check all connections. See if iPod charges while connectedto computer or wall charger.
Music is distorted or sound level is too low.	Check and make sure all EQ and BASS boost options are turned off on your iPod.
Correct DIP Switch settings,but still no text display.	Select DISC 6 to set text output to the correcet location.

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